

**CTT****Question 1**

A, B and C had 108 cookies. A had 6 more cookies than B. C had 18 more cookies than B. How many cookies did B have?

Ans: \_\_\_\_\_

**CTT****Question 2**

A box of chocolate cookies and 4 boxes of strawberry cookies cost \$26. A box of chocolate cookies cost \$6 more than a box of strawberry cookies. How much did a box of chocolate cookies cost?

Ans: \_\_\_\_\_

**Question 3**

A, B and C had 192 cookies. B had 8 more cookies than A. C had thrice as many cookies as A and B. How many more cookies did C have than B?

Ans: \_\_\_\_\_

**Question 4**

A, B and C had 1980 cookies. A had thrice as many cookies as B. C had 40 more cookies than B. How many cookies did C have?

Ans: \_\_\_\_\_

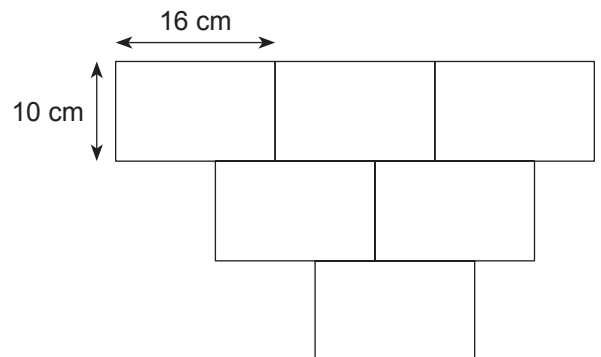
**Question 5**

A, B and C had 10 700 cookies. A had thrice as many cookies as B. B had 380 fewer cookies than C. How many cookies did C have?

Ans: \_\_\_\_\_

**Question 6**

Find the perimeter of the figure.



Ans: \_\_\_\_\_

**Question 7**

A took out  $\frac{1}{5}$  of a box of cookies and put back 8 cookies. In the end, there were 72 cookies left in the box. How many cookies were there in the box at first?

Ans: \_\_\_\_\_

**Question 8**

A had 104 more cookies than B. After B gave A 40 cookies, A had 5 times as many cookies as B. How many cookies did A have at first?

Ans: \_\_\_\_\_

**Question 9**

A had twice as many cookies as B. If A gave B 24 cookies, B would have 32 fewer cookies than A. How many cookies did A and B have altogether?

Ans: \_\_\_\_\_

**Question 10**

A had 32 more cookies than B. After A sold 76 cookies and B sold 192 cookies, A had twice as many cookies as B left. How many cookies did B have at first?

Ans: \_\_\_\_\_

**Question 11**

A had 544 more cookies than B. After A bought 282 cookies and B bought 2550 cookies, B had thrice as many cookies as A. How many cookies did A have at first?

Ans: \_\_\_\_\_

**Question 12**

A and B had an equal amount of money. After A bought 2 chocolate cookies and B bought 3 strawberry cookies, B had twice as much money as A left. If a chocolate cookie cost \$3 and it cost \$1.80 more than a strawberry cookie, how much money did A and B have at first?

Ans: \_\_\_\_\_

**Question 13**

A had some \$2 cookies and \$5 cookies.  $\frac{1}{3}$  of the cookies were \$2 cookies. A exchanged 10 \$5 cookies for \$2 cookies. In the end, A had an equal number of \$2 and \$5 cookies. What was the total value of cookies that A had?

Ans: \_\_\_\_\_

**Question 14**

A and B had an equal number of cookies. After A bought 98 cookies and B bought 392 cookies, B had twice as many cookies as A. How many cookies did B have in the end?

Ans: \_\_\_\_\_

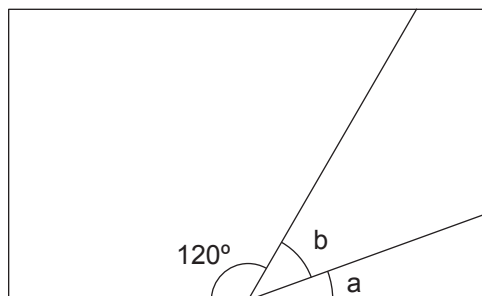
## Question 15

A big cookie measured 58 cm by 36 cm. A wanted to cut out 4-cm square cookies from the big cookie. What was the area of the cookies left?

Ans: \_\_\_\_\_

## Question 16

$\angle b$  is twice the size of  $\angle a$ . Find  $\angle b$ .



Ans: \_\_\_\_\_



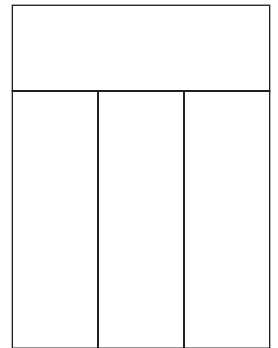
**Question 17**

The perimeter of a rectangular cookie was 96 cm. The length of the cookie was thrice the breadth of the cookie. What was the breadth of the rectangular cookie?

Ans: \_\_\_\_\_

**Question 18**

The area of the figure was 48 m<sup>2</sup>. Find the perimeter of the figure.



Ans: \_\_\_\_\_

**Question 19**

A box of cookies is 6 times as heavy as a packet of cookies. The packet of cookies is 735 g lighter than the box of cookies. What is the mass of the box of cookies and packet of cookies?

Ans: \_\_\_\_\_

**Question 20**

The length of a small square cookie was  $\frac{1}{2}$  the length of a medium square cookie. The length of a medium square cookie was  $\frac{1}{2}$  the length of a large square cookie. If the perimeter of the medium square cookie was 32 cm, find the total area of the cookies.

Ans: \_\_\_\_\_

**Question 21**

A and B had 420 cookies. A had  $\frac{3}{4}$  as many cookies as B. How many cookies did B have?

Ans: \_\_\_\_\_

**Question 22**

A, B and C had 504 cookies. C had 6 times as many cookies as B. C had thrice as many cookies as A. How many cookies did B have?

Ans: \_\_\_\_\_

**Question 23**

A and B had some cookies. A had  $\frac{3}{8}$  of the cookies. B had 592 more cookies than A. How many cookies did A and B have?

Ans: \_\_\_\_\_

**Question 24**

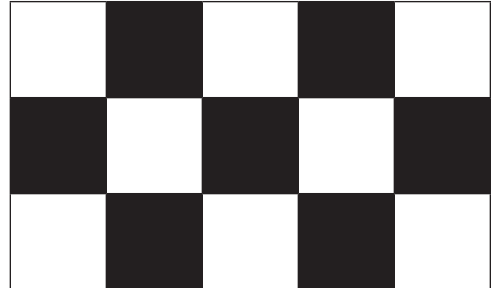
The perimeter of the figure is 120 m. Find the area of the figure.



Ans: \_\_\_\_\_

**Question 25 (MAS/WIR)**

Chocolate cookies and vanilla cookies are arranged in the following pattern in a cookie box measuring 112 cm by 180 cm. If each cookie measures 4 cm by 4 cm, how many vanilla cookies can be packed in the cookie box?



Ans: \_\_\_\_\_

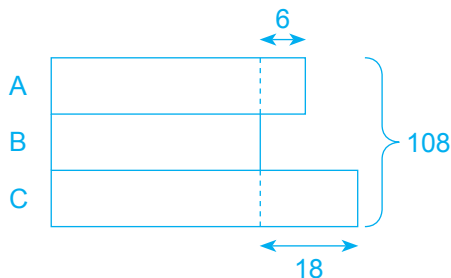
**Question 26 (MAS/WIR)**

A needed 4 bags of flour and 1300 ml of water to make 3000 cookies. A used 144 bags of flour and enough water to bake cookies. If a pail of water contains 2 l of water, how many pails of water did A need?

Ans: \_\_\_\_\_

## CTT

## Question 1



$$3 \text{ units} = 108 - 6 - 18 = 84$$

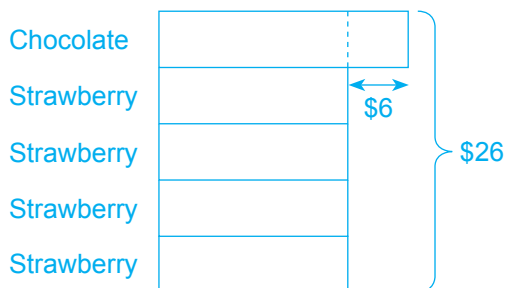
$$1 \text{ unit} = 84 \div 3 = 28$$

B  $\rightarrow$  28 cookies

Ans: 28 cookies

## CTT

## Question 2



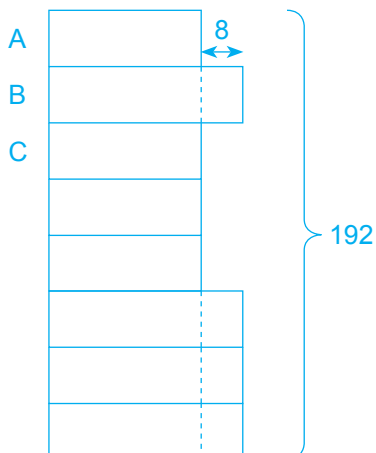
$$5 \text{ units} = \$26 - \$6 = \$20$$

$$1 \text{ unit} = \$20 \div 5 = \$4$$

Chocolate  $\rightarrow$   $\$4 + \$6 = \$10$

Ans: \$10

## Question 3



$$\begin{aligned} 8 \text{ units} &= 192 - 4 \times 8 \\ &= 192 - 32 \\ &= 160 \end{aligned}$$

$$1 \text{ unit} = 160 \div 8 = 20$$

$$B \rightarrow 20 + 8 = 28 \text{ cookies}$$

$$6 \text{ units} = 6 \times 20 = 120$$

$$C \rightarrow 120 + 3 \times 8$$

$$= 120 + 24$$

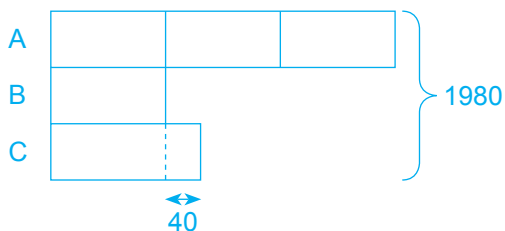
$$= 144 \text{ cookies}$$

$$\text{More (C than B)} \rightarrow 144 - 28$$

$$= 116 \text{ cookies}$$

Ans: 116 more cookies

## Question 4



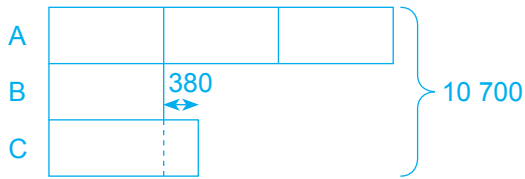
$$5 \text{ units} = 1980 - 40 = 1940$$

$$1 \text{ unit} = 1940 \div 5 = 388$$

$$C \rightarrow 388 + 40 = 428 \text{ cookies}$$

Ans: 428 cookies

Question 5



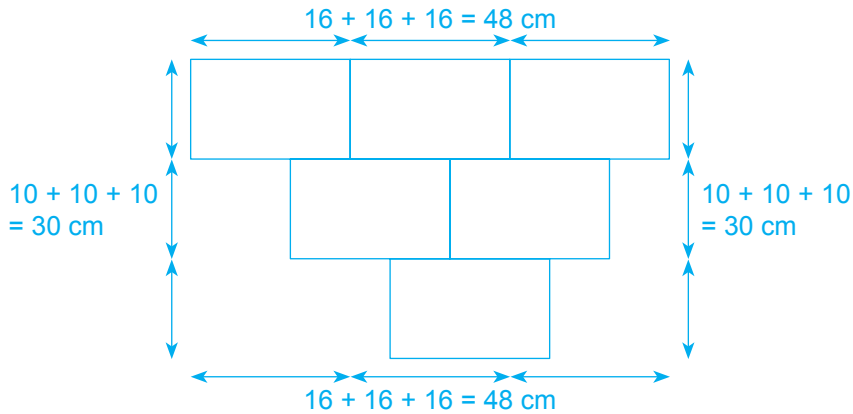
$5 \text{ units} = 10\,700 - 380 = 10\,320$

$1 \text{ unit} = 10320 \div 5 = 2064$

$C \rightarrow 2064 + 380 = 2444 \text{ cookies}$

Ans: 2444 cookies

Question 6

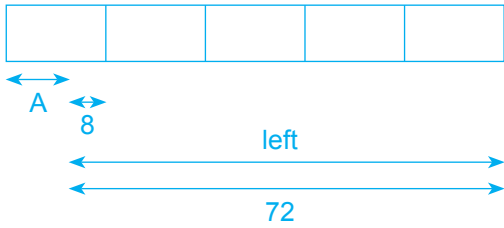


Perimeter (figure)  $\rightarrow 48 + 30 + 48 + 30 = 156 \text{ cm}$

Ans: 156 cm



Question 7



$$4 \text{ units} = 72 - 8 = 64$$

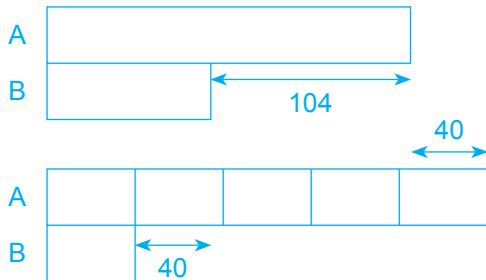
$$1 \text{ unit} = 64 \div 4 = 16$$

$$5 \text{ units} = 5 \times 16 = 80$$

Box  $\rightarrow$  80 cookies

Ans: 80 cookies

Question 8



$$4 \text{ units} = 40 + 104 + 40 = 184$$

$$1 \text{ unit} = 184 \div 4 = 46$$

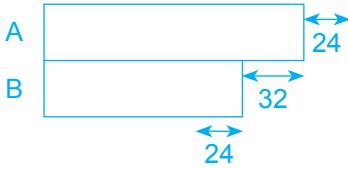
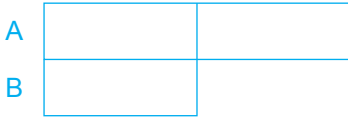
$$5 \text{ units} = 5 \times 46 = 230$$

A (end)  $\rightarrow$  230 cookies

A (at first)  $\rightarrow$   $230 - 40 = 190$  cookies

Ans: 190 cookies

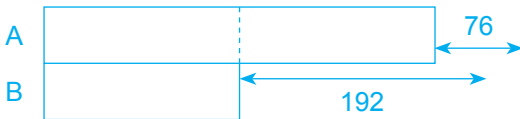
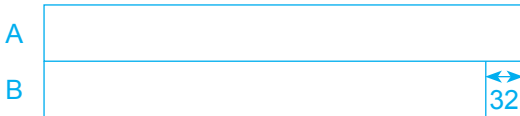
Question 9



1 unit =  $24 + 32 + 24 = 80$   
 3 units =  $3 \times 80 = 240$   
 Total  $\rightarrow$  240 cookies

Ans: 240 cookies

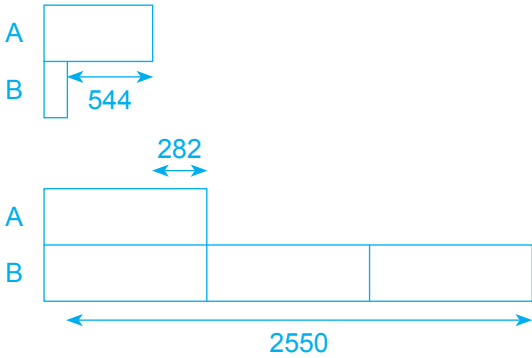
Question 10



1 unit =  $192 + 32 - 76 = 148$   
 B (end)  $\rightarrow$  148 cookies  
 B (at first)  $\rightarrow$   $148 + 192 = 340$  cookies

Ans: 340 cookies

Question 11

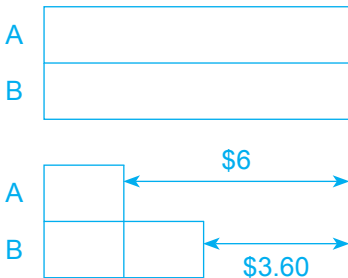


$2 \text{ units} = 2550 - 544 - 282 = 1724$   
 $1 \text{ unit} = 1724 \div 2 = 862$   
 A (end)  $\rightarrow 862$  cookies  
 A (at first)  $\rightarrow 862 - 282 = 580$  cookies

Ans: 580 cookies

Question 12

Chocolate  $\rightarrow \$3$   
 Strawberry  $\rightarrow \$3 - \$1.80 = \$1.20$   
 A (spent)  $\rightarrow 2 \times \$3 = \$6$   
 B (spent)  $\rightarrow 3 \times \$1.20 = \$3.60$

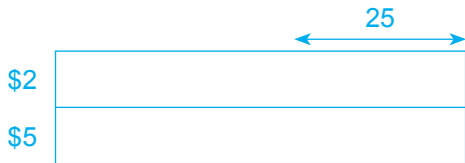


$1 \text{ unit} = \$6 - \$3.60 = \$2.40$   
 A (end)  $\rightarrow \$2.40$   
 A (at first)  $\rightarrow \$2.40 + \$6 = \$8.40$   
 Total (at first)  $\rightarrow 2 \times \$8.40 = \$16.80$

Ans: \$16.80

**Question 13**

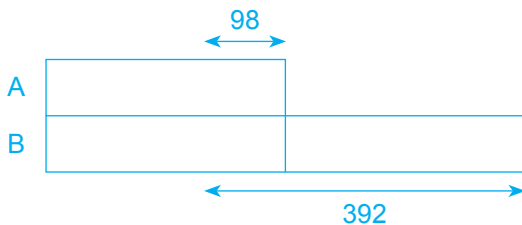
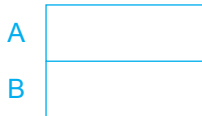
\$5 (exchanged)  $\rightarrow 10 \times \$5 = \$50$   
 \$2 (exchanged)  $\rightarrow \$50$   
 $\rightarrow \$50 \div \$2 = 25$  cookies



1 unit =  $25 + 10 = 35$   
 \$2 (at first)  $\rightarrow 35$  cookies  
 2 units =  $2 \times 35 = 70$   
 \$5 (at first)  $\rightarrow 70$  cookies  
 Value (total)  $\rightarrow 35 \times \$2 + 70 \times \$5$   
 $= \$70 + \$350$   
 $= \$420$

Ans:     \$420    

**Question 14**



1 unit =  $392 - 98 = 294$   
 2 units =  $2 \times 294 = 588$   
 B (end)  $\rightarrow 588$  cookies

Ans:     588 cookies

## Question 15

Number of 4-cm cookies along 58 cm  $\rightarrow 58 \div 4 = 14 \text{ R } 2 \text{ cm}$

Maximum 4-cm cookies along 58 cm  $\rightarrow 14 \text{ cookies}$

Number of 4-cm cookies along 36 cm  $\rightarrow 36 \div 4 = 9 \text{ cookies}$

Total  $\rightarrow 14 \times 9 = 126 \text{ cookies}$

Area (big cookie)  $\rightarrow 58 \times 36 = 2088 \text{ cm}^2$

Area (4-cm cookie)  $\rightarrow 4 \times 4 = 16 \text{ cm}^2$

Area (126 4-cm cookies)  $\rightarrow 126 \times 16 = 2016 \text{ cm}^2$

Area (left)  $\rightarrow 2088 - 2016 = 72 \text{ cm}^2$

Ans: 72 cm<sup>2</sup>

## Question 16

$\angle b \rightarrow 2 \text{ units}$

$\angle a \rightarrow 1 \text{ unit}$

$\angle a + \angle b \rightarrow 1 + 2 = 3 \text{ units}$

$\rightarrow 180^\circ - 120^\circ = 60^\circ$  ( $\angle$ s on a straight line)

3 units =  $60^\circ$

1 unit =  $60^\circ \div 3 = 20^\circ$

2 units =  $2 \times 20^\circ = 40^\circ$

$\angle b \rightarrow 40^\circ$

Ans: 40°

## Question 17

Length  $\rightarrow$  3 units

Breadth  $\rightarrow$  1 unit

Perimeter  $\rightarrow 3 + 1 + 3 + 1 = 8$  units  
 $\rightarrow 96$  cm

8 units = 96 cm

1 unit =  $96 \div 8 = 12$  cm

Breadth  $\rightarrow 12$  cm

Ans: 12 cm

## Question 18

Length (rectangle)  $\rightarrow$  3 units

Breadth (rectangle)  $\rightarrow$  1 unit

Area (rectangle)  $\rightarrow 3 \times 1 = 3$  units<sup>2</sup>

Area (4 rectangles)  $\rightarrow 4 \times 3 = 12$  units<sup>2</sup>

Area (figure)  $\rightarrow 12$  units<sup>2</sup>  
 $\rightarrow 48$  m<sup>2</sup>

12 units<sup>2</sup> = 48 m<sup>2</sup>

1 unit<sup>2</sup> =  $48 \div 12 = 4$  m<sup>2</sup>

= 2 m  $\times$  2 m

1 unit = 2 m

Perimeter (figure)  $\rightarrow 3 + 1 + 3 + 1 + 1 + 1 + 3 + 1 = 14$  units  
 $\rightarrow 14 \times 2 = 28$  m

Ans: 28 m

## Question 19

Box  $\rightarrow$  6 units

Packet  $\rightarrow$  1 unit

Lighter  $\rightarrow 6 - 1 = 5$  units

$\rightarrow 735$  g

5 units = 735 g

1 unit =  $735 \div 5 = 147$  g

Total  $\rightarrow 6 + 1 = 7$  units

$\rightarrow 7 \times 147 = 1029$  g

Ans: 1029 g

## Question 20

Length (small)  $\rightarrow$  1 unit

Length (medium)  $\rightarrow$  2 units

Length (large)  $\rightarrow$  4 units

Perimeter (medium)  $\rightarrow 2 + 2 + 2 + 2 = 8$  units

$\rightarrow 32$  cm

8 units = 32 cm

1 unit =  $32 \div 8 = 4$  cm

Length (small)  $\rightarrow 4$  cm

2 units =  $2 \times 4 = 8$  cm

Length (medium)  $\rightarrow 8$  cm

4 units =  $4 \times 4 = 16$  cm

Length (large)  $\rightarrow 16$  cm

Area (small)  $\rightarrow 4 \times 4 = 16$  cm<sup>2</sup>

Area (medium)  $\rightarrow 8 \times 8 = 64$  cm<sup>2</sup>

Area (large)  $\rightarrow 16 \times 16 = 256$  cm<sup>2</sup>

Area (total)  $\rightarrow 16 + 64 + 256 = 336$  cm<sup>2</sup>

Ans: 336 cm<sup>2</sup>

**Question 21**

A → 3 units

B → 4 units

Total →  $3 + 4 = 7$  units

→ 420 cookies

7 units = 420 cookies

1 unit =  $420 \div 7 = 60$  cookies

4 units =  $4 \times 60 = 240$  cookies

B → 240 cookies

Ans: 240 cookies

**Question 22**

C → 6 units

B → 1 unit

A → 2 units

Total →  $2 + 1 + 6 = 9$  units

→ 504 cookies

9 units = 504 cookies

1 unit =  $504 \div 9 = 56$  cookies

B → 56 cookies

Ans: 56 cookies



## Question 23

A → 3 units

B → 5 units

More →  $5 - 3 = 2$  units

→ 592 cookies

2 units = 592 cookies

1 unit =  $592 \div 2 = 296$  cookies

8 units =  $8 \times 296 = 2368$  cookies

Total → 2368 cookies

Ans: 2368 cookies

## Question 24

Length (rectangle) → 2 units

Breadth (rectangle) → 1 unit

Perimeter (figure) →  $2 + 1 + 2 + 1 + 2 + 1 + 1 = 10$  units

→ 120 m

10 units = 120 m

1 unit =  $120 \div 10 = 12$  m

Breadth (rectangle) → 12 m

2 units =  $2 \times 12 = 24$  m

Length (rectangle) → 24 m

Length (figure) →  $2 + 1 = 3$  units

→  $3 \times 12 = 36$  m

Breadth (figure) → 2 units

→  $2 \times 12 = 24$  m

Area (figure) →  $36 \times 24 = 864$  m<sup>2</sup>

Ans: 864 m<sup>2</sup>

**Question 25 (MAS/WIR)**

1 set ()  $\rightarrow 8 \text{ cm} \times 8 \text{ cm}$

Number of sets along 112 cm  $\rightarrow 112 \div 8 = 14$

Number of sets along 180 cm  $\rightarrow 180 \div 8 = 22 \text{ R } 4 \text{ cm}$

Vanilla (sets) along 112 cm  $\rightarrow 14 \times 2 = 28 \text{ cookies}$

Vanilla (sets) along 180 cm  $\rightarrow 22 \times 2 = 44 \text{ cookies}$

R 4 cm  $\rightarrow 1^{\text{st}}$  4 cm of set along 180 cm

$\rightarrow 1 \text{ cookie (vanilla)}$

Vanilla (total) along 180 cm  $\rightarrow 44 + 1 = 45 \text{ cookies}$

Vanilla (total)  $\rightarrow 28 \times 45 = 1260 \text{ cookies}$

Ans: 1260 cookies

**Question 26 (MAS/WIR)**

1 set (1300 m/ water)  $\rightarrow 4 \text{ bags}$

Number of sets  $\rightarrow 144 \div 4 = 36$

Water (sets)  $\rightarrow 36 \times 1300 = 46\,800 \text{ m/}$

Pails  $\rightarrow 46\,800 \div 2000 = 23 \text{ R } 800 \text{ m/}$

Need  $\rightarrow 23 + 1 = 24 \text{ pails}$

Ans: 24 pails